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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/313,828	05/18/1999	JOHN R. LAU	23119/04016	4354
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23973 7590 05/04/2006

DRINKER BIDDLE & REATH
ATTN: INTELLECTUAL PROPERTY GROUP
ONE LOGAN SQUARE
18TH AND CHERRY STREETS
PHILADELPHIA, PA 19103-6996

EXAMINER

SILVERMAN, ERIC E

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/313,828	Applicant(s) LAU ET AL.	
	Examiner Eric E. Silverman, PhD	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-29 and 31-41 is/are pending in the application.
- 4a) Of the above claim(s) 1-4, 6, 29, 31 and 37-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5, 7-28 and 32-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>NPL</u> |

DETAILED ACTION

Applicant is advised that the Examiner assigned to this Application has changed. The Examiner currently assigned to this Application is **Eric Silverman, PhD**, whose contact information can be found at the end of this action. Applicant is further advised that this Application is currently assigned to **Art Unit 1615**.

Receipt of Applicants' Response to Notice of Non-Compliant Amendment, filed 1/27/2006, is acknowledged.

Claims 1-11, 13-29, 31-41 are pending, and claims 1-4, 6, 29, 31, and 37-41 are withdrawn. As such, claims 5, 7-28, and 32-36 are currently being considered on the merits.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 5, 7-28, 30, and 32-36 **remain** rejected under 35 U.S.C. 102(b) as being anticipated by US 4,603,044 or WO 88/00474, to Geho et al for reasons of record and reasons discussed below.

Response to Arguments

Applicant's arguments have been fully considered, but are not persuasive. Applicant argues that Geho does not disclose multiple linked units. However, attention is drawn to the diagram on col.'s 5 and 6 of Geho, which clearly shows two linked units, said units being linked by a bridging chromium atom. The two linked units of Geho read on "multiple linked units" of instant claims.

Claims 5, 13, 22, 24, 32 and 33 **remain** rejected under 35 U.S.C. 102(b) as being anticipated by US 5,407,660

Response to Arguments

Applicants' arguments have been fully considered, but are not persuasive.

Applicants' argument that the Bosworth's compounds are water-soluble whereas the compounds of the claims are insoluble is not persuasive because there is no limitation in the claims that requires the compounds of the invention to be insoluble. Further, Bosworth's compounds are, in at least some embodiments, water insoluble. Note col. 5, lines 25 – 28 where the liposomes of Bosworth become *suspended* in an aqueous solution. If the liposomes are suspended in water, they do not dissolve, and thus are water insoluble. Applicants' further argue that Bosworth does not disclose multiple units linked by a metal bridge. However, this is inherent in the disclosure of Bosworth. Note that Bosworth discloses chelated metal cations, including lanthanide (III) cations, such as gadolinium (III) (Example 1, C and D). The chelating agents are bulky octadentate ligands. Lanthanides cations are known to have coordination numbers of at least eight, and sometimes as high as ten. A single octadentate ligand would not be able to occupy all of the coordination sites on a single gadolinium ion because of conformational constraints. As such, at least two ligands units inherently bind to each gadolinium (III) ion, the result being multiple linked chelating units, wherein the link is via a gadolinium bridge, as required by instant claims.

Claims 5, 13, 15, 18, 22, 24, 32 - 35 **remain** rejected under 35 U.S.C. 102(b) as being anticipated by US 4,310,506 to Baldeschieler.

Response to Arguments

Applicants' arguments have been fully considered, but are not persuasive.

Applicants' argue that Baldeschieler does not disclose multiple linked units. However, this is an inherent feature of the disclosure. Baldeschieler discloses metals, such as cobalt, which are preferably chelated by the tridentate ligand NTA (col. 3, lines 20 – 26). However, cobalt has a coordination number between four and eight, which means that at least two NTA ligands must coordinate to each cobalt ion. As such, the complexes disclosed by Baldeschieler inherently comprise two linked chelating units (NTA), wherein the units are linked by a bridging unit (cobalt).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hu et al., "Lord of the Rings: An Octameric Lanthanum Pyrazolonate Cluster", Angew. Chem. Int. Ed., 2000, 39(15) pp. 2745-2747 is noted for the teaching the coordination number of lanthanide ions. The disclosure "Cobalt", downloaded from the world wide web from bilbo.chem.uri.edu/PeriodicTable/cobalt.htm is noted for the teaching of the coordination number of cobalt.

No claims are allowed. No claims are free of the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric E. Silverman, PhD whose telephone number is 571 272 5549. The examiner can normally be reached on Monday to Friday 7:30 am to 4:00 pm.

Art Unit: 1615

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 571 272 0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eric E. Silverman, PhD
Art Unit 1615

THURMAN K. PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600